

PATENT COOPERATION TREATY

PCT/EP2004/005882
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From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)
(PCT Rules 44bis.3(c) and 72.2)

To:

GROSS, Felix
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Date of mailing (day/month/year) 11 May 2006 (11.05.2006)	Maikowski & Ninnemann Eingegangen	
Applicant's or agent's file reference AMG166WO	18. Mai 2006 <i>U</i>	IMPORTANT NOTIFICATION
International application No. PCT/EP2004/005882	Frist: Geprüft:	International filing date (day/month/year) 01 June 2004 (01.06.2004)
Applicant AMI AGROLINZ MELAMINE INTERNATIONAL GMBH et al		

1. Transmittal of the translation to the applicant.

- The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).
- The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HIU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Yolaine Cussac

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PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference AMG166WO	FOR FURTHER ACTION		See item 4 below
International application No. PCT/EP2004/005882	International filing date (<i>day/month/year</i>) 01 June 2004 (01.06.2004)	Priority date (<i>day/month/year</i>) 12 June 2003 (12.06.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant AMI AGROLINZ MELAMINE INTERNATIONAL GMBH			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 8 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input checked="" type="checkbox"/>	Box No. II	Priority
<input checked="" type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

Date of issuance of this report
01 May 2006 (01.05.2006)

Authorized officer

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PATENT COOPERATION TREATY

**From the
INTERNATIONAL SEARCHING AUTHORITY**

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

		Date of mailing (day/month/year)
Applicant's or agent's file reference AMG166WO		FOR FURTHER ACTION See paragraph 2 below
International application No. PCT/EP2004/005882	International filing date (day/month/year) 01.06.2004	Priority date (day/month/year) 12.06.2003
International Patent Classification (IPC) or both national classification and IPC		
Applicant AMI AGROLINZ MELAMINE INTERNATIONAL GMBH		

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input checked="" type="checkbox"/> | Box No. II | Priority |
| <input checked="" type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP	Authorized officer
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/005882

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
 - a sequence listing
 - table(s) related to the sequence listing
 - b. format of material
 - in written format
 - in computer readable form
 - c. time of filing/furnishing
 - contained in the international application as filed.
 - filed together with the international application in computer readable form.
 - furnished subsequently to this Authority for the purposes of search.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/005882

Box No. II	Priority
<p>1. <input checked="" type="checkbox"/> The following document has not yet been furnished:</p> <p><input type="checkbox"/> copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).</p> <p><input type="checkbox"/> translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).</p> <p>Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.</p> <p>2. <input type="checkbox"/> This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.</p> <p>3. Additional observations, if necessary:</p>	

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/005882

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- the entire international application
 claims Nos. 14-16

because:

- the said international application, or the said claims Nos. _____ relate to the following subject matter which does not require an international preliminary examination (specify):

See supplemental sheet,

- the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 14-16 are so unclear that no meaningful opinion could be formed (specify):

- the claims, or said claims Nos. _____ are so inadequately supported by the description that no meaningful opinion could be formed.

- no international search report has been established for said claims Nos. _____

- the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

- has not been furnished
 does not comply with the standard

the computer readable form

- has not been furnished
 does not comply with the standard

- the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

- See Supplemental Box for further details.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/EP2004/005882

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1 - 13	YES
	Claims		NO
Inventive step (IS)	Claims	1 - 13	YES
	Claims		NO
Industrial applicability (IA)	Claims	1 - 13	YES
	Claims		NO

2. Citations and explanations:

V-1. Prior art

D1: WO 99/00374 A (NOE SERGIO; EUROTECNICA CONTRACTORS AND EN (IT)) 7 January 1999 (1999-01-07)

D2: WO 97/34879 A (DSM NV; HAAN ANDRE BANIER DE (NL); SAMPERS THEODORUS JOSEPHUS ANN (NL) 25 September 1997 (1997-09-25)

D3: WO 02/12206 A (AGROLINZ MELAMIN GMBH; BAIRAMIJAMAL FARAMARZ (AT); BUCKA HARTMUT (AT)) 14 February 2002 (2002-02-14)

D4: WO 02/34730 A (AGROLINZ MELAMIN GMBH; BUCKA HARTMUT (AT); COUFAL GERHARD (AT); KOGLG) 2 May 2002 (2002-05-02)

V-2. Novelty (PCT Article 33(2))

The methods disclosed in D1-D4 differ from those defined in claim 1 in that the pressures and temperatures used therein during the urea pyrolysis (<400°C, <300 bar) are not accompanied by supercritical conditions under which a homogeneous phase would be formed.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/005882

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Claims 1-13 therefore meet PCT Article 33(2).

V-3. Inventive step (PCT Article 33(3))

D1-D4 disclose non-catalytic high-pressure methods of preparing melamine from urea. The problem to be solved by the present application can be seen as being that of finding alternative procedures.

The solution specified is that of pyrolysis under supercritical conditions. Since there is no mention anywhere in D1-D4 of the possibility of pyrolysis under supercritical conditions in a homogeneous phase, the present solution is not regarded as being obvious.

Claims 1-13 meet PCT Article 33(3).

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/005882

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box III

Claims 14-16 are regarded as lacking clarity (PCT Article 6) to such an extent that it is not possible to deliver an opinion on novelty or inventive step. In accordance with PCT Rule 6.3(a) the claims shall define the scope of protection by means of technical features. Claims 14-16, however, define only part of the apparatus used (the tubular reactor), without further specifying what additional features and/or apparatus are needed "to implement the method according to claim 1", i.e. for the pyrolysis of urea under supercritical conditions. Tubular reactors are known (see D1, for instance). It is unclear what apparatus claims 14-16 are intended to define. A meaningful comparison with the prior art is therefore impossible.